



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20531  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/283,192	04/01/1999	YUTAKA KURABAYASHI	35.C1331	9638

5514 7590 11/08/2002  
FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

09/283,192

**Applicant(s)**

KURABAYASHI, YUTAKA

**Examiner**

Callie E. Shosho

**Art Unit**

1714

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 63-70 and 73-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 63-70 and 73-82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/9/02 has been entered.

2. Applicant's amendment filed 8/9/02, which was previously not entered, has now been entered. All outstanding rejections are overcome by this amendment.

**Claim Rejections - 35 USC § 112**

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 63-70 and 73-82 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 82 has been amended to recite the phrase “non-self-dispersing pigment”. The cited phraseology clearly signifies a “negative” or “exclusionary” limitation for which the applicants have no support in the original disclosure. Negative limitations in a claim which do not appear in the specification as filed introduce new concepts and violate the description requirement of 35 USC 112, first paragraph, *Ex Parte Grasselli, Suresh, and Miller*, 231 USPQ 393, 394 (Bd. Pat. App. and Inter. 1983); 783 F. 2d 453. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed.

It is suggested that the phrase “non-self dispersing pigment” is replaced with “water-insoluble pigment” support for which is found on page 16, lines 7-9 of the present specification.

5. Claims 63-70 and 73-82 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for solid concentration of 8% (as found in the examples), does not reasonably provide enablement for any solids concentration of self-dispersing pigment and resin encapsulating a coloring material. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. That is, while the example of the present specification disclose the use of self-dispersing pigment and resin encapsulating a coloring material or self-dispersing pigment only in solids concentration of 8%, there does not appear to be any disclosure in the specification for self-dispersing pigment and resin encapsulating a coloring material at any solids concentration.

Case law holds that applicant's specification must be "commensurately enabling [regarding the scope of the claims]" *Ex Parte Kung*, 17 USPQ2d 1545, 1547 (Bd. Pat. App. Inter. 1990). Otherwise **undue experimentation** would be involved in determining how to practice and use applicant's invention. The test for undue experimentation as to whether or not all compounds within the scope of claims 63-70 and 73-82 can be used as claimed and whether claims 63-70 and 73-82 meet the test is stated in *Ex parte Forman*, 230 USPQ 546, 547 (Bd. Pat. App. Inter. 1986) and *In re Wands*, 8 USPQ2d 1400, 1404 (Fed.Cir. 1988). Upon applying this test to claims 63-70 and 73-82, it is believed that undue experimentation **would** be required because:

(a) *The quantity of experimentation necessary* is **great** since claims 63-70 and 73-82 read on any solids concentration of self-dispersing pigment and the resin encapsulating a coloring material

(b) There is **no direction or guidance presented** for making an ink comprising any solids concentration of self-dispersing pigment and the resin encapsulating a coloring material.

(c) There is an **absence of working examples** concerning making ink comprising any solids concentration of self-dispersing pigment and the resin encapsulating a coloring material.

In light of the above factors, it is seen that undue experimentation would be necessary to make and use the invention of claims 63-70 and 73-80.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 63-70 and 73-82 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 82 recites the self-dispersing pigment and the resin encapsulating a coloring material are dispersed in aqueous medium at “a solid concentration A”. The scope of the claim is confusing because it is not clear what is meant by this phrase. What solid concentrations does this encompass? Does “A” represent a specific value of solids concentration or can “A” be any value?

(b) Claim 82 recites, “resin being contained in a sufficient amount to provide rub resistance to an image produced with the ink”. The scope of the claim is confusing because it would appear from the examples in the present specification it is the resin encapsulating a coloring material, not the resin itself, which provides rub resistance.

(c) Claim 82, line 11 recites that the ink of the present invention provides image with optical density that is “substantially” equivalent to optical density of ink containing self-dispersing pigment alone. The scope of the claim is confusing because it is not clear what is meant by “substantially”. How close must the optical densities be to be considered “substantially” equivalent? Clarification is requested.

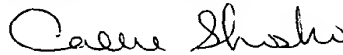
(d) Claim 82, lines 9-13 recite that the optical density of the presently claimed ink with both self-dispersing pigment and resin encapsulating a coloring material is equivalent or substantially equivalent to ink containing self-dispersing pigment only. However, when comparing the inks found in Table 2, page 58 of the present specification, i.e. either ink 1 or ink 2 which each comprise both self-dispersing pigment and resin encapsulating a coloring material

with comparative ink 1 which comprises only self-dispersing pigment, it is seen that the inks of the present invention have optical density of "B", i.e. from 1.2-1.34, while ink outside the scope of the invention has optical density of "A", i.e. not lower than 1.35. Is this difference considered "substantially equivalent"? Given that ink with "A" optical density can possess any optical density greater than 1.35, i.e. 1.4, 1.5, 1.6, etc. it would appear that the difference between ink with "A" optical density and ink with "B" optical density can be quite large. Clarification is requested.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho  
Examiner  
Art Unit 1714